

What is claimed is:

1. A method for use in an Internet Protocol (IP) telephone connected to a network comprising a plurality of network elements, said IP telephone including a display, for determining and displaying call billing information, said method comprising the steps of:

- a) initializing said IP telephone with billing rates and time of day;
- b) completing a telephone call from said IP telephone;
- c) calculating a call cost from said billing rates and the time of day;
- d) displaying said call cost on said IP telephone display;
- e) repeating steps b through d) until said call disconnects;
- f) calculating a total cost for said call; and
- g) storing said total cost for said call.

2. A method in accordance with claim 1 wherein step a) comprises downloading the billing rates and time of day from servers in the network.

3. A method in accordance with claim 1 wherein said IP telephone is connected to said network via a local area network (LAN) and step a) occurs when said IP telephone is connected to said LAN.

4. A method in accordance with claim 1 wherein said IP telephone is connected to said network via a local area network (LAN) and step a) occurs when said IP telephone is connected to a power supply.

5. A method in accordance with claim 1 wherein said network includes a Trivial File Transfer Protocol (TFTP) server including said billing rates, wherein step a) comprises obtaining said billing rates from said TFTP server.

6. A method in accordance with claim 5 further including the step of downloading billing rates whenever said billing rates change on said TFTP server.

7. A method in accordance with claim 5 wherein said IP telephone is initialized using initialization scripts, and wherein step a) comprises obtaining initialization scripts from said TFTP server.

8. A method in accordance with claim 1 wherein said network includes a Time of Day (TOD) server that provides time of day information to said network elements, wherein step a) comprises obtaining the time of day from said TOD server.

9. A method in accordance with claim 8 wherein step d) further includes displaying the network time of day on the IP telephone display.

10. A method in accordance with claim 1 wherein said IP telephone is connected to said network via a LAN, wherein a PC is also connected to said LAN, said method further including the step of:

h) storing said total cost as a record for said call on said PC.

11. A method in accordance with claim 10 further including the step of:

i) querying and sorting said records on said PC.

12. A method in accordance with claim 11 further including the step of:

j) printing said records.

13. A method in accordance with claim 1 wherein said IP telephone is connected to said network via a LAN, wherein a workstation is also connected to said LAN, said method further including the step of:

h) storing said total cost as a record for said call on said workstation.

14. A method in accordance with claim 13 further including the step of:

i) querying and sorting said records on said workstation.

15. A method in accordance with claim 14 further including the step of:

j) printing said records.

16. A method for initializing an IP telephone for displaying and storing call billing information, said IP telephone connected to a network, said network using Internet Protocol (IP) and including a Dynamic Host Configuration Protocol (DHCP) server, a Trivial File Transfer Protocol (TFTP) server, and a Time of Day (TOD) server, said method comprising the steps of:

requesting initialization information from said DHCP server;

receiving the IP address of TFTP server and the filename of an initialization script file for said IP telephone from said DHCP server;

requesting said initialization script file from said TFTP server;

receiving from TFTP Server the initialization script file;

requesting time of day information from said TOD server;

receiving from said TOD server the network time of day;

requesting billing rates and application software images from said TFTP

server; and

receiving from TFTP server the rates information and other application software images.